

Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT

Desired Community Condition(s)

Air, land and water systems protect health and safety.

Water resources are sustainably managed, conserved and protected to provide a long term supply and drought reserve.

Program Strategy:ENVIRONMENTAL SERVICES

56502

To protect the environment in the areas of landfills and groundwater.

Department: ENVIRONMENTAL HEALTH

Service Activities

Environmental Protection

Household Hazardous Waste Collection Center

Strategy Purpose and Description

Program Strategy's mission: Protection of the public health, safety and the environment through: landfill monitoring, characterization & remediation; regional groundwater monitoring & protection.
Commonality of purpose ties its Service Activities together: Protection of the public health, safety and the environment.

Primary customers or clients of the Program Strategy: Property owners of land on or adjacent to former City landfills, those with work locations at and near former landfills, and the Balloon Fiesta RV Park users; current and future customers of the City's water utility.

Current state of customer conditions: Safety risks from explosive concentrations of methane offsite at former Los Angeles Landfill; groundwater contamination at former Los Angeles Landfill and other landfills.

Customer conditions being addressed: Los Angeles Landfill methane reduction; process is underway to hire a contractor to begin addressing groundwater contamination at the Los Angeles Landfill.

Changes and Key Initiatives

Los Angeles Landfill: Contractor is hired and has identified remedial alternatives. ESD technical staff have selected preferred alternative for remediating groundwater contamination plume. Contractor will design and construct system; Landfill gas extraction system has reduced gases to below explosive levels in shallow zones and continues to address explosive levels in deeper zones; Monitoring of site and surrounding areas continues at a high level of frequency; Grading is done, as funds allow, where additional work is needed; Clifford Channel re-alignment will be designed in 2002 and construction anticipated in 2002/2003.

Other Landfills: Contractor has completed phase I of study to characterize and assess landfill gas risk at other City landfills that EHD oversees. Report submitted in March 2002. Recommendations will be reviewed and implemented in 2002/2003.

Priority Objectives

Fiscal Year Priority Objectives

2005	OBJECTIVE 4. Construct and begin operation of the groundwater remediation system at the former Los Angeles Landfill and report on progress to the Mayor and City Council by the end of FY/05.
2005	OBJECTIVE 2. Continue to characterize the extent that landfill gas has migrated outside of the boundaries of former City owned and/or operated landfills. Develop and initiate plans to address public health and safety risks from migrating landfill gases and report on progress to the Mayor and Council by the end of FY/05.

Input Measure (\$000's)

2001	110	110 GENERAL FUND	1,504
2002	110	110 GENERAL FUND	1,453
2003	110	110 GENERAL FUND	1,423
2004	110	110 GENERAL FUND	1,137
2005	110	110 GENERAL FUND	1,322

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
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100% of nine former landfills are free of contamination.	<i>% of nine former landfills fully monitored, characterized and remediated</i>	2001					
		2002	0%				
		2003	11%	1/9	11%	1/9	
		2004	11%	1/9	11%	1/9	11%
		2005	11%	1/9			

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Albuquerque's groundwater is a usable water resource, free of contamination.	<i>GPPAP is implemented. 100% of outcome will take long period.</i>	2001				47 / 111 cases)
		2002	42%			47 / 111 cases)
	<i>% of groundwater cases in remediation</i>	2003	tbd			
		2004	tbd		40%	includes LUSTs, Superfund and NMED-GW Bureau sites (68/170 cases)
		2005	tbd			

Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT

Parent Program Strategy: ENVIRONMENTAL SERVICES

Department: ENVIRONMENTAL HEALTH

Service Activity: Environmental Protection

5640000

Service Activity Purpose and Description

Services Delivered: (Groundwater) Regional groundwater monitoring, including installation and monitoring of a regional network and other field support activities, data management and policy development; City fueling facility environmental compliance; liquid waste permitting.

(Landfill) Oversee landfill gas monitoring, characterization and, where necessary, remediation of landfill gas risk at former landfills to protect the public from risk of explosive conditions and exposure to toxic substances.

Customers/Clients: Current and future customers of the City's water utility and users of the groundwater resource; City Fleet Management and those who use the fueling facilities; owners of properties which require septic tanks. Property owners of land on or adjacent to former City landfills, those whose work locations are at and near former landfills, the Balloon Fiesta RV Park users, current and future customers of the City's water and solid waste utilities, Solid Waste Management Department, Planning Department, Public Works Department.

State of Customer Conditions: Groundwater contamination at former Los Angeles Landfill; 110 total cases of groundwater contamination in the Albuquerque area; City fleet fueling facilities are in compliance with New Mexico Underground Storage Tank Regulations. Safety risks from explosive concentrations of methane offsite at former Los Angeles Landfill have been reduced in shallow depths due to the landfill gas extraction system; deeper zones are continuing to be addressed; ESD landfill gas engineer reviews development plans to ensure landfill gas risks are addressed; process is underway to hire a contractor to characterize and assess landfill gas risk at other former City landfills; landfill gas contribution to groundwater contamination at former Los Angeles Landfill will be considered in design of groundwater remediation system. Customer conditions addressed: Los Angeles Landfill methane production and landfill gas characterization and assessment at other former City landfills.

Changes and Key Initiatives

Remediation of a groundwater contamination plume that is emanating from the former Los Angeles Landfill is required by New Mexico Water Quality Control Commission regulations. Environmental Services, assisted by HGC, a hydrogeological consulting firm, will complete the Los Angeles Landfill groundwater remediation system design in early FY04. Requests for bids to construct the system will follow. Construction is anticipated to begin shortly after Balloon Fiesta 2003, and the system is expected to come on-line in FY04.

When the system comes on-line, additional costs associated with its operation and maintenance will impact the Environmental Services landfill budget. The Department is working with City Leadership to address the additional landfill resource needs as part of the FY04 budget planning process.

Input Measure (\$000's)

2002	110	110 GENERAL FUND	758
2003	110	110 GENERAL FUND	781
2004	110	110 GENERAL FUND	786
2005	110	110 GENERAL FUND	839

Strategic Accomplishments

FY03: Pilot tests completed and final design of the Los Angeles Landfill groundwater remediation system is underway in compliance with State and Federal regulations and the Groundwater Protection Policy and Action Plan. (O&M funding is in place for FY04, but additional O&M may be needed when it operates for a full year in FY05.)

FY03: Explosive levels of methane near the surface around all boundaries of Los Angeles Landfill are reduced. Phase I surveys of other former City landfills have been conducted to determine whether similar explosive risks may be present. Phase II work is underway to identify whether landfill gas is migrating away from these former landfill sites, and if migration has occurred, the extent of migration and concentrations of landfill gases.

Q1FY04 update

Phase I for the Eubank, Yale and San Antonio landfills has been completed.

Landfill gas monitoring wells around the boundaries of these landfills were installed to determine whether gas has migrated away from the landfills. Phase II (quarterly monitoring) is underway. First quarter monitoring indicates landfill gas has migrated away from the Eubank landfill boundaries, and to a limited extent at San Antonio landfill. Continued quarterly monitoring will determine whether migration of landfill gas poses a threat to the health and safety of the public.

FY03: The Environmental Compliance Program works to ensure compliance of City fueling facilities with the New Mexico Storage Tank regulations through monitoring, testing and a permitting process. City fueling facilities have been free of violations for over three years.

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of development projects reviewed for landfill gas safety measures	2001			23	
# of development projects reviewed for landfill gas safety measures	2002	30			
# of development projects reviewed for landfill gas safety measures	2003	25	27	67	
	2004	25	20	35	
	2005	35			
Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of former landfills surveyed	2001			2	
# of former landfills surveyed	2002	9			
# of former landfills surveyed	2003	9	9	9	
	2004	9	9	9	
	2005	9			
Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of groundwater sampling events	2001			172	
# of groundwater sampling events	2002	175			
# of groundwater sampling events	2003	130	58	140	
	2004	130	58	129	
	2005	130			
Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of landfill gas monitoring events - for explosive potential	2001			3,386	
# of landfill gas monitoring events - for explosive potential	2002	3,175			
# of landfill gas monitoring events - for explosive potential	2003	2,450	1242	2411	
	2004	2,450	1192	2351	
	2005	2,400			
Output Measures	Year	Projected	Mid-Year	Actual	Notes
% (and ratio) of former landfills where groundwater contamination is present and known to be traveling offsite. (Goal is 0%)	2001			33% 3/9	

% (and ratio) of former landfills where groundwater contamination is present and known to be traveling offsite. (Goal is 0%)	2002	33% 3/9			
% (and ratio) of former landfills where groundwater contamination is present and known to be traveling offsite. (Goal is 0%)	2003	33% 3/9	33% 3/9	33% 3/9	
	2004	33% 3/9	33% 3/9	33% 3/9	
	2005	33% 3/9			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of State for Federal environmental audit violations at City fueling facilities. (Goal is 0.)	2001			0	
# of State for Federal environmental audit violations at City fueling facilities. (Goal is 0.)	2002	0			
# of State for Federal environmental audit violations at City fueling facilities. (Goal is 0.)	2003	0	0	0	
	2004	0	0	0	
	2005	0			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% (and ratio) of 9 former landfills surveyed for explosion potential	2001			22% 2/9	33% 3 / 9 Possibly more, depending on progress of contractor, once hired
% (and ratio) of 9 former landfills surveyed for explosion potential	2002	100%			Ratio is 9/9
% (and ratio) of 9 former landfills surveyed for explosion potential	2003	100% 9/9	100% 9/9	100% 9/9	
	2004	100% 9/9	100% 9/9	100% 9/9	
	2005	100% 9/9			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% (and ratio) of landfill groundwater monitoring events that meet drinking water standards. (Goal is 100%.)	2001			61% 58/95	64% 61 / 95
% (and ratio) of landfill groundwater monitoring events that meet drinking water standards. (Goal is 100%.)	2002	56%(52/92)			

% (and ratio) of landfill groundwater monitoring events that meet drinking water standards. (Long-term goal is 100%. Quarterly measures will vary significantly due to sampling at different locations.)	2003	50%	56% 24/43	57% 44/77	Long-term goal is 100%. Quarterly measures will vary significantly due to sampling at different locations.
	2004	50%	56% 24/43	59% 50/85	Long-term goal is 100%. Quarterly measures will vary significantly due to sampling at different locations.
	2005	59% 50/85			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% (and ration) of off site landfill gas monitoring events greater than 100% of the lower explosive limit at Los Angeles Landfill	2001			9%152/162 4	11% (155 / 1,416)
% (and ration) of off site landfill gas monitoring events greater than 100% of the lower explosive limit at Los Angeles Landfill	2002	6%			Ratio is 54/1129
% (and ratio) of off-site landfill gas monitoring events greater than 100% of the lower explosive limit at Los Angeles Landfill. (Goal is 0%.)	2003	6% 52/828	5% 28/608	8% 88/1121	
	2004	6% 52/828	5% 23/489	6.7% 64/951	
	2005	6.5% 64/984			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% of new development projects at or near landfills reviewed for landfill gas safety. (Goal is 100%)	2001			100%	
% of new development projects at or near landfills reviewed for landfill gas safety. (Goal is 100%)	2002	100%			
% of new development projects at or near landfills reviewed for landfill gas safety. (Goal is 100%)	2003	100%	100%	90%	
	2004	100%	100%	100%	
	2005	100%			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% of the landfills where contamination is present that are monitored quarterly for groundwater contamination. (Goal is 100%)	2001			100%	

% of the landfills where contamination is present that are monitored quarterly for groundwater contamination. (Goal is 100%)	2002	33%				
% of the landfills where contamination is present that are monitored twice per year for groundwater contamination. (Goal is 100%)	2003	100%	33%	1/3	33%	1/3
	2004	33%	33%	1/3	33%	1/3
	2005	33%				

Goal: ENVIRONMENTAL PROTECTION AND
ENHANCEMENT

Parent Program Strategy: ENVIRONMENTAL SERVICES

Department: ENVIRONMENTAL HEALTH

Service Activity: Household Hazardous Waste Collection Center

5641000

Service Activity Purpose and Description

Services Delivered: Household hazardous waste collection center oversight and administration; used oil and antifreeze recycling; hazardous waste technical assistance.

Customers/Clients: Albuquerque citizens, specifically residents of City and County who seek advice on household hazardous waste and use the Household Hazardous Waste Collection Center (HHWCC), car owners and businesses that receive technical assistance; Solid Waste Management and Public Works Departments, Fire Marshal

State of Customer Conditions: Current funding allows the HHWCC to manage all household hazardous waste brought to the site by participants; used oil and antifreeze recycling is done through business partnerships; hazardous waste technical assistance is provided on request

Customer Conditions Addressed: providing a safe disposal method for household hazardous waste; helping to protect SWMD workers from unnecessary exposure to hazardous substances; minimal education of the public on waste minimization and reuse

Changes and Key Initiatives

Effective FY02, Household Hazardous Waste Collection Center is opened two additional days each week, for a total of four days (M,W,F,Sat.) Continue to provide the extended service and stay within budget.

FY03: The Household Hazardous Waste Collection Center contract is up for renewal in July 2003. Rinchem Company, Inc. was awarded the contract.

FY04: As follow-up to an Internal Audit recommendation, ESD has requested in the FY04 budget process, that funding be provided in a non-reverting account, so that any monies not expended during a fiscal year will remain available for the service in future years.

Position supporting this program has been deleted.

Input Measure (\$000's)

2002	110	110 GENERAL FUND	351
2003	110	110 GENERAL FUND	351
2004	110	110 GENERAL FUND	351
2005	110	110 GENERAL FUND	483

Strategic Accomplishments

FY/02: Household hazardous waste separated from the solid waste stream at the Solid Waste convenience centers disposed at the HHWCC.

HHWCC is open four days a week (M,W,F, Sat.), an increase of two days per week.

FY03: Rinchem Co., Inc. has been awarded the contract to provide service starting July 1, 2003.

<i>Output Measures</i>	<i>Year</i>	<i>Projected</i>	<i>Mid-Year</i>	<i>Actual</i>	<i>Notes</i>
# of HHWC participants	2001			4,750	
	2002	4,750			
# of HHWC participants					
# of HHWC participants	2003	4,750	2,810	5,577	
	2004	6,300	3,084	6,372	
	2005	6,300			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Amount of household hazardous waste managed at City's Household Hazardous Waste Collection Center.	2001			272,800lbs	
Amount of household hazardous waste managed at City's Household Hazardous Waste Collection Center.	2002	330,053 lb			
Amount of household hazardous waste managed at City's Household Hazardous Waste Collection Center.	2003	250,000 lb	100,000 lb	200,000 lb	
	2004	250,000 lb	137,165 lb	242,475 lb	
	2005	250,000 lb			
Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% of people using the Household Hazardous Waste Center who felt they were treated professionally	2001			99%	
% of people using the Household Hazardous Waste Center who felt they were treated professionally	2002	99%			
% of people using the Center who felt they were treated professionally.	2003	97%	97%	98%	